

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An air bag apparatus for shielding a vehicle occupant in the event of a side crash, said air bag apparatus comprising:

- an acceleration sensor which detects acceleration in a side direction larger than a predetermined value to generate a detection signal;
- an inflater which generates a gas in response to said detection signal; and
- an air bag which is folded initially, and expands with said gas, wherein said air bag comprises a main section having one end which receives gas from said inflater and a protrusion section which is provided attached to and extending outwardly away from a tip portion of said main section such that an inner space of said protrusion section is connected with an inner space of said main section, said tip portion being disposed at an opposite end of the main section from said one end, said protrusion section extending substantially tangentially to the tip portion of said main section in a direction orthogonal to an expansion direction of the air bag and having at least one opening formed therein from which said gas is spouted.

2. (Currently Amended) The air bag apparatus according to claim 1, wherein said protrusion section extends beyond said main section and comprises a ~~semi-cylindrical~~ pipe shape with openings formed therein at opposing ends thereof.

3. (Currently Amended) The air bag apparatus according to claim 1, wherein said protrusion section is narrower than said tip portion of said main section and ~~[[has]]~~ said at least one opening is formed in a portion thereof connected with and spaced away from said main section by an intermediate portion of the protrusion section.

1 4. (Previously presented) The air bag apparatus according to claim 1, wherein said
2 protrusion section is pushed into the inner space of said main section prior to expansion.

1 5. (Currently amended) An air bag apparatus for shielding a vehicle occupant in the event
2 of a side crash, said air bag apparatus comprising:

3 an acceleration sensor which detects acceleration in a side direction larger than a
4 predetermined value to generate a detection signal;

5 an inflater which generates a gas in response to said detection signal; and

6 an air bag which is folded initially, and expands with said gas, wherein said air
7 bag comprises a main section having one end which receives gas from said inflater and a
8 protrusion section which is provided attached to and extending outwardly away from a tip
9 portion of said main section such that an inner space of said protrusion section is connected
10 with an inner space of said main section, said tip portion being disposed at an opposite end of
11 the main section from said one end, said protrusion section extending substantially
12 tangentially to the tip portion of said main section in a direction orthogonal to an expansion
13 direction of the air bag and having at least one opening formed therein from which said gas is
14 spouted;

15 wherein said protrusion section is pushed into the inner space of said main section
16 prior to expansion such that said protrusion section is turned inside out.

1 6. (Previously presented) The air bag apparatus according to claim 1, wherein said main
2 section comprises first and second side panels, which are sewed in a limb portion for
3 contacting a limb of a vehicle occupant, such that outer surfaces of said first and second side
4 panels are joined to each other.

1 7. (Previously presented) The air bag apparatus according to claim 1, wherein said main
2 section comprises first and second side panels, and further wherein said air bag has at least
3 one partition provided between said side panels in said inner space of said main section.

1 8. (Original Claim) The air bag apparatus according to claim 7, wherein said at least one
2 partition is formed by sewing a predetermined portion of said first and second side panels.

1 9. (Currently amended) The air bag apparatus according to claim 8, wherein said
2 predetermined portion is shaped as one of a curved line, a circle or a semicircle.

1 10. (Currently amended) The air bag apparatus according to claim 8, wherein each said
2 predetermined portion is ~~shaped as a circle~~ substantially linear or S-shaped.

1 11. (Currently amended) The air bag apparatus according to claim 8, including multiple said
2 partitions defined by respective predetermined portions and wherein said predetermined
3 ~~portion is shaped as a semicircle~~ portions are shaped differently from each other.

1 12. (Currently amended) The air bag apparatus according to claim ~~[[7]]~~ 8, wherein said
2 predetermined portion determines an expansion direction of said air bag during an expanding
3 process.

1 13. (Currently Amended) An air bag apparatus for side crash, comprising:
2 an acceleration sensor which detects acceleration in a side direction larger than a
3 predetermined value to generate a detection signal;
4 an inflator which generates a gas in response to said detection signal; and

an air bag which is folded initially, and expands with said gas substantially in parallel to a linear expansion direction, wherein said air bag has at least one partition provided in an inner space of said air bag to determine the shape of the air bag during an expansion process, thereby facilitating high speed expansion of the air bag to a final shape thereof.

14. (Currently Amended) The air bag apparatus according to claim 13, wherein said air bag comprises first and second side panels, which are sewed in a limb portion such that outer edges of said first and second side panels are joined to each other, and air bag has more than one of said partitions.

15. (Currently amended) The air bag apparatus according to claim 13, wherein said air bag comprises first and second side panels, and further wherein said ~~at least one partition is~~ partitions are formed by sewing [[a]] predetermined portions of said first and second side panels.

16. (Currently amended) The air bag apparatus according to claim 15, wherein each said predetermined portion is shaped as a curved line, a circle or a semicircle.

17. (Currently amended) The air bag apparatus according to claim 15, wherein each said predetermined portion is ~~shaped as a circle~~ substantially linear or S-shaped.

18. (Currently amended) The air bag apparatus according to claim 15, wherein said predetermined ~~portion is shaped as a semicircle~~ portions are shaped differently from each other.

1 19. (Currently amended) The air bag apparatus according to claim ~~[[13]]~~ 15, wherein said
2 predetermined portion determines an expansion direction of said air bag during an expanding
3 process, said expansion direction being substantially opposed to where the gas enters the air
4 bag.

1 20. (Currently Amended) An air bag used for an air bag apparatus for shielding a vehicle
2 occupant in the event of a side crash, said air bag comprising:

3 a main section having one end which receives gas from an inflater; and

4 a protrusion section which is attached to and extends outwardly away from a tip
5 portion of said main section in an expanded configuration of said air bag such that an inner
6 space of said protrusion section is connected with an inner space of said main section,

7 wherein said air bag is folded initially, and expands with ~~[[a]]~~ the gas from ~~[[an]]~~
8 the inflater, said tip portion being disposed at an opposite end of the main section from said
9 one end, and said protrusion section extends substantially tangentially to the tip portion of
10 said main section in a direction orthogonal to an expansion direction of the air bag and has at
11 least one opening formed therein from which said gas is spouted.

1 21. (Currently amended) The air bag according to claim 20, wherein said protrusion section
2 extends outwardly beyond the main section and comprises a ~~semi-cylindrical~~ pipe shape with
3 openings formed therein at opposing ends thereof.

1 22. (Currently amended) The air bag according to claim 20, wherein said protrusion section
2 is narrower than said tip portion and has at least one opening in a portion thereof connected
3 with said main section and spaced away therefrom by an intermediate portion of the
4 protrusion section, and wherein upon deployment of said air bag, gas is expelled from said

5 opening in a direction substantially perpendicular to a substantially linear expansion
6 direction.

1 23. (Previously presented) The air bag according to claim 20, wherein said
2 protrusion section is pushed into the inner space of said main section prior to expansion.

24. (Currently amended) An air bag for use in an air bag apparatus to shield a vehicle
occupant in the event of a side crash, said air bag comprising:

a main section having one end which receives gas from an inflater; and

a protrusion section which is attached to and extends outwardly away from a tip
portion of said main section in an expanded configuration of said air bag such that an inner
space of said protrusion section is connected with an inner space of said main section,

wherein said air bag is folded initially, and expands with [[a]] the gas from [[an]]
the inflater, said tip portion being disposed at an opposite end of the main section from said
one end, and said protrusion section extends substantially tangentially to the tip portion of
said main section in a direction orthogonal to an expansion direction of the air bag and has at
least one opening formed therein from which said gas is spouted;

wherein said protrusion section is pushed into the inner space of said main
section prior to expansion such that said protrusion section is turned inside out.

1 25. (Currently amended) An air bag used for an air bag apparatus shielding a vehicle
2 occupant in the event of a side crash, said air bag comprising first and second side panels,

3 wherein said first and second side panels are sewed in a limb portion such that
4 outer surfaces of said first and second side panels are joined to each other, and

5 wherein said air bag further comprises ~~at least one~~ multiple partitions provided in

6 an inner space of said air bag, said air bag is folded initially, and expands with gas supplied
7 from an inflator substantially in parallel to a linear expansion direction, and said partitions
8 determine the shape of the air bag during an expansion process, thereby facilitating high
9 speed expansion of the air bag to a final shape thereof.

1 26. (Currently amended) The air bag apparatus according to claim 25, wherein said ~~at least~~
2 ~~one partition is~~ partitions are formed by sewing ~~[[a]]~~ predetermined portions of said first and
3 second side panels.

1 27. (Currently amended) The air bag apparatus according to claim ~~[[25]]~~ 26, wherein each
2 said predetermined portion is shaped as a curved line ~~substantially linear or S-shaped.~~

1 28. (Currently amended) The air bag apparatus according to claim ~~[[25]]~~ 26, wherein said
2 ~~predetermined portion is~~ portions are ~~shaped as a circle~~ differently from each other .

1 29. (Currently amended) The air bag apparatus according to claim ~~[[25]]~~ 26, wherein said
2 ~~predetermined portion is~~ portions are ~~shaped as a semicircle~~ disposed non-symmetrically
3 within the air bag.